

CLAIMS

What is claimed is:

1. A method of selectively altering the appearance of a device having at least one photochromic compound, comprising the steps of:
 - energizing an ultraviolet light source forming a portion of the device; and
 - exposing at least a portion of the device having the at least one photochromic compound to the ultraviolet light source.
2. The method of claim 1, wherein the step of energizing the ultraviolet light source comprises the step of providing power to an ultraviolet light emitting diode within the device.
3. The method of claim 1, wherein the step of exposing further comprises the step of providing a status indication of a function within the device.
4. The method of claim 1, wherein the method further comprises the step of varying an apparent intensity of the ultraviolet light source incident upon the portion of the device having the at least one photochromic compound.
5. The method of claim 4, wherein the step of varying comprises varying a duty-cycle to vary the apparent intensity of the ultraviolet light source and thereby varying the intensity of the color change.
6. The method claim 1, wherein the device has more than one photochromic compound and more than one ultraviolet light source tailored to cause each respective photochromic compounds to react, wherein the method further comprises energizing respective ultraviolet light sources to expose respective photochromic compounds to the respective ultraviolet light sources.

7. The method claim 1, wherein the method further comprises the step of causing the photochromic compound in the device to be immune from external ultraviolet sources.
8. A device capable of selectively altering its appearance, comprising:
a housing portion of the device having at least one photochromic compound; and
an ultraviolet light source forming a portion of the device for exposing at least a portion of the device having the at least one photochromic compound to the ultraviolet light source.
9. The device of claim 8, wherein the ultraviolet light source is at least one ultraviolet light emitting diode.
10. The device of claim 9, wherein the at least one ultraviolet light emitting diode comprises at least one UV-A LED and at least one UV-B LED.
11. The device of claim 10, wherein the device comprises a first portion having at least one photochromic compound substantially reactive the at least one UV-A LED and a second portion having at least one photochromic compound substantially reactive to the at least one UV-B LED.
12. The device of claim 8, wherein the ultraviolet light source and a resulting reaction by the at least one photochromic compound provides a status indicator for the device.
13. The device of claim 12, wherein the device is selected from the group comprising a portable communication device, a personal digital assistant, a laptop computer, a camera, a global positioning device, a printer, a camcorder, a vehicle, a toy, a personal hygiene device, a watch, a calculator, and a writing instrument.

14. The device of claim 13, wherein the status indicator provides an indication of at least one among a charge status of a power source for the device, an in/out of range indication, an audio mode of device (silent/audible), a voice mail waiting indication, a message waiting indication, an active call indication, an identification of a certain person calling, an emergency/priority call indication, a device setting, mode or configuration (weekend, office, etc).

15. The device of claim 12, wherein the status indicator can vary the intensity of the color change of the photochromic compound by varying a duty cycle to vary an apparent intensity of the ultraviolet light source upon the photochromic compound.

16. The device of claim 15, where the status indicator provides an indication of at least one selected from the group comprising a volume level, a signal strength, a battery charge level, a number of missed calls, a number of voicemail messages waiting, a number of messages waiting, an ink level, a memory used level, a memory available, a number of pictures taken, a period of time left, a fuel level, and a distance traveled.

17. The device of claim 8, wherein the device is arranged and constructed to have the photochromic compound in the device to be immune from external ultraviolet sources.

18. The device of claim 8, wherein the device is arranged and constructed so reactions by the photochromic compounds therein are controlled solely by the ultraviolet light sources within the device.

19. The device of claim 18, wherein the device further comprises materials that substantially block ultraviolet light from external sources to the device.

20. A device capable of altering its appearance, comprising:
a housing portion of the device having at least one photochromic compound; and
at least one light sensor at least partially within the housing portion.
21. The device of claim 20, wherein the device further comprises an internal ultraviolet source for selectively changing the color of the housing portion.
22. The device of claim 20, wherein the housing portion comprises a function button that has a portion that changes color and further changes function in correspondence with a change in color.
23. The device of claim 22, wherein the at least one light sensor enables the corresponding change in function with the change in color.
24. An electronic device, comprising
a housing;
a display lens and a plurality of buttons within apertures of the housing; and
at least one photochromic compound on at least one among the housing, the display lens and the plurality of buttons, wherein exposure to ultraviolet light causes the at least one photochromic compound to change color.
25. The electronic device of claim 24, wherein the color change provides greater visibility to at least one among the plurality of buttons, writing on the buttons, the display lens, images on the display lens, and the housing.
26. The electronic device of claim 24, wherein the color change provides less visibility to at least one among the plurality of buttons, writing on the buttons, the display lens, images on the display lens, and the housing.

27. A writing instrument, comprising:
- a pen-shaped housing; and
 - an ink cartridge within the housing wherein the ink cartridge within the housing comprises a photochromic compound that changes colors when exposed to ultraviolet light.